

## **Speaker Bios**

### **Sally Bruce**

Ms. Sally Bruce is currently the Quality Manager for NIST Measurement Services: Calibrations and Standard Reference Materials. Ms. Bruce has developed, documented, implemented, and managed quality systems for specific NIST measurement service areas since 1992. She previously served as the Chief of the National Voluntary Laboratory Accreditation Program (NVLAP) from 2006-2011.

Ms. Bruce's career at NIST, formerly NBS, has spanned 30 years and her responsibilities and experience is vast and includes generic-technical and more specific engineering in the fields of electrical and mechanical, electromagnetics, vacuum technology, particle physics, thermodynamics and heats of combustion, in a variety of research and development efforts, and calibrations in the discipline of optical radiation. Her experiences as a physical scientist have included responsibilities for measurement science and research, quality management, technical editing and writing for various publications and media, teaching and presenting information, project management for a variety of laboratory activities and developing infrastructure including information technology and website management.

She possesses a strong educational background that includes lead assessor training. She has written quality documentation, developed and delivered training for the standard ISO/IEC 17025 and for the assessment process at NIST. She has provided consultation for a number of stakeholders of NIST (internal and external) for the development of their quality systems and for the interpretation of the standard's requirements. She has actively participated as a member of the task force committees at NIST for the development of the Quality Manual for Measurement Services (NIST QM-I). She organizes, plans, and coordinates the on-going assessments of the quality systems for the NIST divisions that provide measurement services. She is responsible for assuring the overall implementation of the NIST Quality System and its conformance to ISO standards.

Ms. Bruce is the official NIST representative to the System Interamericana de Metrologia (SIM-Spanish for Inter-American Metrology System) Quality System Task Force (QSTF). SIM is the regional metrology organization for the Americas. The SIM QS TF is composed of representatives from the SIM countries that are signatories to the International Committee on Weights and Measures (Comité International des Poids et Mesures, or CIPM) Mutual Recognition Arrangement (MRA). The SIM QS TF reviews and determines the acceptance of each National Metrology Institute's (NMI) Quality System, a necessary step for final approval of NMI capabilities in the measurement areas under the CIPM MRA.

She is a qualified lead assessor for the ISO 9000 series of quality management systems and is a peer evaluator for accreditation bodies with emphasis in calibration accreditations throughout Asia Pacific (APLAC) and a lead peer evaluator the Americas (IAAC) using the ISO/IEC 17011, the standard used for conformity assessment bodies.

**Lisa Carnahan**

Lisa Carnahan is a computer scientist in the Standards Coordination Office at the National Institute of Standards and Technology. She is currently responsible for helping to develop conformity assessment programs within the federal government and the private sector to meet key national needs. Her key areas of focus include health information technology, cloud computing, and cybersecurity risk. She currently serves as the NIST lead in the US Federal Risk and Authorization Management Program (FedRAMP).

Previously Ms. Carnahan served as the Group Leader in NIST's Interoperability Group in the Information Technology Laboratory. Her group was primarily responsible for collaboration with industry to develop key health IT standards, test methods and conformity assessment approaches.

**Ileana Martinez**

Ileana Martinez is an International Affairs Advisor in the Standards Coordination Office at the National Institute of Standards and Technology (NIST). She also serves as International Affairs Advisor to the National Voluntary Laboratory Accreditation Program (NVLAP) at NIST and is President of the Inter American Accreditation Cooperation (IAAC).

Ms. Martinez has expertise in the U.S. approach to standards, regulations, conformity assessment, laboratory accreditation, as well as in the National Technology Transfer and Advancement Act (Public Law 104-96), U.S. trade obligations under the World Trade Organization (WTO) Technical Barriers to Trade Agreement (TBT), the U.S. Inquiry Point, and related topics.

From 1996 through 2000, Ms. Martinez served as the NIST Regional Standards Attaché at the U.S. Embassies in Buenos Aires, Argentina and in Brasilia, Brazil, with standards-related responsibilities for South America, seeking to reduce technical barriers to trade in the region. Ms. Martinez earlier worked as a Standards Engineer in a variety of industrial sectors for both U.S. and overseas organizations gaining hands-on experience in national, regional and international standardization and conformity assessment activities.

Ms. Martinez earned a bachelor degree in Mechanical Engineering from the Catholic University of America in Washington, D.C. and did graduate work at American University in Washington, D.C. in Science/Technology Policy.

**Warren Merkel**

Warren Merkel serves as Chief of the National Voluntary Laboratory Accreditation Program (NVLAP), responsible for overall management of the organization. He is active in the Asia Pacific Laboratory Accreditation Cooperation (APLAC), the InterAmerican Accreditation Cooperation (IAAC), and the International Laboratory Accreditation Cooperation (ILAC). Mr. Merkel previously served as Chief of

NVLAP from 2003 to 2006. After leaving the accreditation community for six years to teach high school chemistry, he returned to NVLAP in 2012.

From 1996 to 2003, Mr. Merkel was employed by the American Association for Laboratory Accreditation (A2LA), most recently as Technical Manager. From 1992 to 1996, he worked as an Investigative Chemist in the Defense Logistics Agency Analytical Product Testing Center in Philadelphia, PA.

Mr. Merkel holds a B.S. in Chemistry from Temple University and a M.Ed. in Curriculum and Instruction from Bloomsburg University.

### **James Olthoff**

James Olthoff is the Deputy Director of the Physical Measurement Laboratory of the National Institute of Standards and Technology (NIST). As Deputy Director of PML, Jim is responsible for the realization of the fundamental units at NIST and for all related calibration services. Jim has worked at NIST since 1987 where he performed research related to electrical breakdown in gases of interest to the electric power and semiconductor industries, and performed calibrations of high voltage transformers and capacitors. In 2001 he became the Chief of the Quantum Electrical Metrology Division, which was the organization that maintains the fundamental electrical standards for the United States, until he was appointed Deputy Director of the Electronics and Electrical Engineering Laboratory in 2007.

Jim has published over 120 publications and has co-authored/edited four books. His international metrology responsibilities include serving as the Chair of the Sistema Interamericano de Metrologia (SIM) Quality System Task Force (QSTF), representing SIM on the Joint Committee of the Regional Metrology Organizations (JCRB), and representing NIST on the Consultative Committee on Electricity and Magnetism. Jim also serves as the NIST representative to the Boards of the NCSL International.

Jim received his Ph.D. in physics from the University of Maryland in 1985 in the area of atomic and molecular physics. He then held a two-year appointment at The Johns Hopkins School of Medicine before being hired by NIST.